The commission proposes amendments to §§335.8, 335.341, 335.342, 335.344, 335.348 and 335.551,

concerning Industrial Solid Waste and Municipal Hazardous Waste rules.

EXPLANATION OF THE PROPOSED RULES

proposing changes to clarify the existing State Superfund rule.

The commission is proposing a new rule, commonly referred to as the Texas Risk Reduction Program rule, that will establish a uniform set of risk-based performance-oriented technical standards to guide response actions at affected properties regulated via the agency's Office of Waste Management program areas and other applicable program areas. The rule will be promulgated as new 30 Texas Administrative Code (TAC) Chapter 350. The commission is proposing amendments to Chapter 335 as a conforming rulemaking to the proposed new Chapter 350. In addition, the commission is

Section 335.8 of Subchapter A defines the applicability of the existing risk reduction rules to persons who perform closures and remediations at facilities or areas subject to industrial solid waste and municipal hazardous waste regulations. The commission proposes to add to subsection (a) provisions that will establish dates by which persons must terminate their use of the existing risk reduction rules for projects in progress. New closures and remediations reported and initiated after the effective date of Chapter 350 must comply with that chapter. Subsection (b) establishes the closure and remediation obligations which must be completed once a person establishes applicability under subsection (a). The commission proposes to add provisions to paragraph (2) of subsection (b) to clarify the performance requirement for closure for waste management facility components such as a tank, sump, surface

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impoundment, etc., and to distinguish the requirements for remediation of unauthorized discharges, which are to be addressed with the procedures of Chapter 350 after the effective date of that chapter.

Section 335.341 of Subchapter K (relating to Hazardous Substance Facilities Assessment and Remediation) establishes the purpose and scope of the State Superfund Program. In §335.341(b), the existing rule cites Health and Safety Code, §361.271 as the statutory guidance for determining who is a potentially responsible party. To clarify that other statutory language exists addressing potential liability, the commission is proposing to include Health and Safety Code, §361.275(g) along with §361.271 as statutes that identify potentially responsible parties.

The commission proposes to add a new subsection (c) to §335.341 to define the applicability of the Texas Risk Reduction Program to the release or threatened release of hazardous substances into the environment that may constitute an imminent and substantial endangerment to the public health and safety or the environment. The commission is proposing that Chapter 350 shall be applicable to the State Superfund Program unless it conflicts with a statutory requirement or a requirement of Subchapter K. In this instance, the requirements of the statute and Subchapter K shall apply rather than Chapter 350.

Section 335.342 contains definitions for the State Superfund Program. The commission is amending the definitions of "Remedial action" and "Remedial investigation" to note that they are similar to a response action and an affected property assessment, respectively, under the Texas Risk Reduction

Program. Also, a reference to "baseline risk assessment" has been removed from the definition of remedial investigation because the Texas Risk Reduction Program no longer uses baseline risk assessments. Instead, proposed Chapter 350 specifies requirements for the development of protective concentration levels including defining human health exposure pathways and points of exposure.

Section 335.344 addresses delisting of State Superfund sites from the State Superfund Registry.

Subsection §335.344(c) outlines five criteria the executive director will consider in determining whether to delist a site. The commission proposes to add a sixth criteria to the current five.

Specifically, the commission is proposing to add language allowing the executive director to consider whether the site has been deferred to a state or federal agency for further action as a criteria for delisting.

The proposed changes to §335.348, General Requirements for Remedial Investigations, remove references to "baseline risk assessment" consistent with changes to §335.342.

Section 335.551 establishes the purpose, scope and applicability of Chapter 335, Subchapter S (relating to Risk Reduction Standards). The commission proposes to add to subsection (c) provisions that will establish dates by which persons must terminate their use of the existing risk reduction rules for projects in progress. New closures and remediations reported and initiated after the effective date of Chapter 350 must comply with that chapter.

FISCAL NOTE

Matthew Johnson, Chief Financial Officer Division, has determined that there will be fiscal implications as a result of administration and enforcement of the proposed sections. For the first five-year period the section as proposed is in effect, individuals, businesses, state agencies, local governments and other entities participating in and subject to the State's environmental remediation programs, will be affected. The State's environmental remediation programs affect the Superfund, Petroleum Storage Tank Remediation, the Voluntary Cleanup Program, the Industrial and Hazardous Waste program, the Municipal Solid Waste, the Composting and the Underground Injection Control programs.

As a whole, the proposed Texas Risk Reduction Program rules are expected to have positive economic effects on responsible parties subject to the State Superfund, Voluntary Cleanup, and Industrial and Hazardous Waste programs. These positive effects are primarily expected to take the form of cost savings for remediation. In some situations, remediation cost savings may be substantial. For participants in the Petroleum Storage Tank program, the cost of assessment, remediation or monitoring may or may not increase, depending on the nature and extent of contamination, the geologic setting and proximity to groundwater, surface water, sources of drinking water and developed real estate. The following summarizes, by agency program, the anticipated effects on costs of the proposed Texas Risk Reduction Program rule. Costs and cost savings for sites in the Industrial and Hazardous Waste, Underground Injection Control and Composting programs are expected to be similar to those in the State Superfund and Voluntary Cleanup programs. To the extent that Municipal Solid Waste facilities

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are subject to the proposed rule, the costs and cost savings are also expected to be similar to the

Voluntary Cleanup and State Superfund programs. To facilitate this discussion, the phases of any site,

regardless of agency program, are generically referred to as "site assessment," "remediation," and

"monitoring."

Site Assessment

Petroleum Storage Tank Remediation Program: Costs are expected to remain level or increase.

Increases under the Texas Risk Reduction Program are driven by site-specific conditions. For

example, under the Texas Risk Reduction Program, benzene at a groundwater site requires additional

delineation. Generally, there will be no increase for soils-only sites.

Superfund Program: Costs are expected to generally decrease, reflecting a shift in assessment from

background to health-based levels.

Voluntary Cleanup Program: Cost are expected to remain generally level. While revised in content,

costs are not expected to change due to the Texas Risk Reduction Program.

Remediation

Petroleum Storage Tank Remediation Program: Costs are expected to remain level or increase. For

groundwater sites, costs may increase if there is no landowner concurrence for a plume management

zone or natural attenuation is ineffective. For soil-only contaminated sites, generally no increase in

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cost is anticipated.

Superfund Program: Costs are expected to decrease, substantially in some cases, or remain level due

to the shift from background to health-based clean-up standards.

Voluntary Cleanup Program: Costs are expected to decrease, substantially in some cases, or remain

level due to the shift from background to health-based clean-up standards.

Monitoring

Petroleum Storage Tank Remediation Program: Costs are expected to remain level or increase. Costs

will increase with plume management zone or natural attenuation remedies. Generally, no cost

increases are anticipated with removal/excavation remedies under the Texas Risk Reduction Program.

Superfund Program: Costs are expected to decrease or remain level. Small businesses should benefit

from the new financial assurance option. Some responsible parties may benefit from the \$100,000

financial assurance waiver.

Voluntary Cleanup Program: Costs are expected to decrease or remain level. Small businesses should

benefit from the new financial assurance option. Some responsible parties may benefit from the

\$100,000 financial assurance waiver.

The proposed Texas Risk Reduction Program rule should afford cost saving to responsible parties required to demonstrate financial assurance for post response action care. Where the total 30- year cost of post-response action care is estimated at less than \$100,000, the proposed rule gives the agency the option to exempt the responsible party from demonstrating financial assurance. Responsible parties benefitting from this new provision should realize savings in the form of staff or consultant time to prepare, submit and monitor a financial assurance mechanism, and the actual cost of the financial assurance instrument.

The proposed Texas Risk Reduction Program rules should also afford cost saving to responsible parties who are small businesses, as defined, and who are required to demonstrate financial assurance for post-response action care. Under the proposed rules, small business may seek to reduce the amount of financial assurance demonstrated if the post response action care period is greater than 10 years.

Cost implications for State agencies, local governments, business, the public and others that own Underground Storage Tanks, Superfund sites, Voluntary Cleanup, Industrial and Hazardous Waste, Municipal Solid Waste, Composting and Underground Injection Control sites are the same as for other persons subject to these remediation programs. The TNRCC, as the agency administering these programs, may realize a reduction in costs to manage or oversee sites, primarily Superfund and Voluntary Cleanup, where the proposed Texas Risk Reduction Program rule allows scaled-down assessments, remediation or monitoring. While the agency's "per-site" cost of management or oversight are expected to decline where scaled-down assessments, remediation or monitoring are

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allowed, specific cost savings to the agency cannot be quantified due to the uncertainties of how many new sites will come into these programs in the future and what their site characteristics will be. For State Superfund sites, where federal funding is not involved, any reductions in the cost of assessment, remediation or monitoring as a result of the proposed Texas Risk Reduction Program rule will represent direct savings to the State. Again, specific cost savings to the state cannot be quantified due to the uncertainties of how many new State Superfund sites will come into the program and which, if any, will benefit from the provisions of the proposed Texas Risk Reduction Program rules.

PUBLIC BENEFIT

Mr. Johnson also has determined that, for the first five-year period, the sections as proposed are in effect, the public benefit anticipated as the result of enforcement of and compliance with the section will be greater flexibility for individuals, businesses, state agencies, local governments and other entities participating in and subject to the State's environmental remediation programs. Additionally, some participants in the State's Superfund, Voluntary Cleanup, Industrial and Hazardous Waste, Municipal Solid Waste, Composting and Underground Injection Control programs may realize cost savings where the proposed sections facilitate remediation to risk-based protective concentration levels rather than to background concentrations. Some participants in the State's Petroleum Storage Tank program may experience higher costs as a result of the proposed sections. Additionally, the proposed rule shifts the focus of the Petroleum Storage Tank program to greater natural resource protection which should benefit the public.

DRAFT REGULATORY IMPACT ANALYSIS

The commission has reviewed the rulemaking in light of the regulatory analysis requirements of Texas Government Code §2001.0225 to assess whether the proposed rule is a major environmental rule and whether any the four applicability criteria of the statute are met.

A "major environmental rule" as defined by §2001.0225(g)(3) of the Texas Government Code means a rule the specific intent of which is to protect the environment or reduce risks to human health from environmental exposure and that may adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state or a sector of the state. The proposed rule is intended to protect the environment and reduce risks to human health from environmental exposure to releases of chemicals of concern. The proposed rule as applied will impact the economy, a sector of the economy, productivity, competition, jobs, the environment, or the public health and safety of the state. The degree of impact that rises to the level of a material adverse effect is subject to interpretation. The Commission is confident the overall effect of the proposed rule will be positive for human health, the environment and the economy, but it may adversely affect in a material way a sector of the economy. Specifically, The commission anticipates a sector of the economy involved with leaking petroleum storage tanks may realize some increased financial burden when the proposed rule begins to apply to it in year 2001. Although debatable, this sector may argue that the proposed rule's financial impact on them is material and adverse. Other sectors of the economy may believe the same.

A major environmental rule requires a draft regulatory impact analysis if it: (1) exceeds a standard set by federal law, unless the rule is specifically required by state law; (2) exceeds an express requirement of state law unless the rule is specifically required by federal law; (3) exceeds a requirement of a delegation agreement or contract between the state and an agency or representative of federal government to implement a state and federal program; or (4) is adopted solely under the general powers of the agency instead of under the provisions of a specific state law. The proposed rule does not exceed a state or federal law. Although differing in some individual aspects, the proposed rule does not exceed standards set by federal law or standards set by state law. Federal and state statutes require action to ensure current and future protection of human health and the environment from releases of regulated substances and hazardous waste into the environment. The proposed rule institutes the criteria by which protective response actions will be achieved in Texas. The proposed rule does not exceed the requirements of any delegation agreement between the state and an agency of the federal government. The Municipal Solid Waste (MSW), Underground Injection Control (UIC), Petroleum Storage Tank (PST), and Resource Conservation and Recovery Act (RCRA) programs are the only programs affected by the proposed rule that have received federal delegation or federal approval. The rule was developed to not exceed any federal requirement. Finally, the rule is not being proposed solely under the general powers of the commission.

Because the proposed rule applies to every TNRCC corrective action program, and because different parties may have different beliefs about whether the proposed rule as applied adversely affects them in a material way, the commission will, for the purpose of conducting this draft regulatory impact

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analysis pursuant to §2001.0225, treat the proposed rule as a major environmental rule. The full draft regulatory impact analysis is presented in Figure 1 of the preamble to proposed 30 Texas Administrative Code Chapter 350.

The commission invites public comment on the Draft Regulatory Impact Analysis.

STATEMENT OF THE EFFECT OF THE PROPOSED RULE ON SMALL BUSINESSES

The proposed Texas Risk Reduction Program ("proposed rule") will have an economic effect on small businesses. That economic effect may be an increase in the cost of complying with the proposed rule or may be a cost savings. Assuming in the interest of caution that any negative economic effect, regardless of degree, falls within the meaning of "adverse economic effect" in the Texas Government Code, §2006.002, the Texas Natural Resource Conservation Commission ("commission") must "reduce that effect if doing so is legal and feasible considering the purpose of the statute under which the rule is to be adopted."

The purpose of the statutes under which the proposed rule is adopted is the protection of human health and the environment. In light of this substantial purpose, it is unreasonable to hold any entity responsible for remediating contaminated property to a lesser standard than that which is scientifically determined to be protective of human health and the environment. Indeed, allowing small businesses to remediate properties under less stringent conditions because of economic impacts is tantamount to allowing small businesses to endanger human health and the environment while others cannot. Because

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the majority of the proposed rule establishes methodologies for removing health risks to the public and

the environment resulting from contamination, it is not legal or feasible to broadly reduce the effect of

the proposed rule on small businesses when doing so will endanger human health and the environment.

However, the commission is allowing expanded use of exposure prevention remedies which are often

more affordable than pollution cleanup remedies so that all businesses would have more remedial

options and better cost containment opportunities.

An exception in the proposed rule specifically aimed at reducing any adverse economic impact of the

proposed rule on small businesses, if any, concerns financial assurances. Financial assurances are

necessary to provide funding for the continued maintenance of engineered remedial actions such as a

concrete cap covering contaminated soil. Under the proposed rule, small businesses responsible for a

remediation may seek to reduce the amount of financial assurance if the post response action care

period is greater than 10 years. The proposed rule also provides a flexible framework in which to

calculate cleanup levels and establishes performance-based standards rather than design standards for

all entities responsible for remediating contamination, including small businesses, allowing them to

determine for themselves the most appropriate cleanup level and the least costly means by which a

cleanup goal is to be achieved. Finally, specific clarity is provided in rule provisions to facilitate rule

interpretation so that persons, including small and large businesses alike, can make decisions that are

likely to be approved by the agency the first time.

Analysis and Comparison of the Cost of Compliance with the Proposed Rule for Small Businesses

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Using the Cost for Each \$100 of Sales

Benefits and Costs to Small Businesses:

Taken as a whole, the proposed rule is expected to have a positive economic impact on small

businesses subject to the Industrial and Hazardous Waste, State Superfund, and the Voluntary Cleanup

Programs. These positive impacts are primarily expected to take the form of cost savings for

remediation and financial assurance. Small businesses actively involved in cleaning up a site,

regardless of program, would achieve the same cost savings as a large business. Cost impacts to

businesses subject to the Municipal Solid Waste, Composting, and Underground Injection Control

programs are expected to be similar to those subject to the Industrial and Hazardous Waste, State

Superfund, and Voluntary Cleanup programs. Conversely, small businesses participating in the

Petroleum Storage Tank Program would incur the same potential cost increase under the proposed rule

as a large business.

The definition of "small business" is "a legal entity, including a corporation, partnership, or sole

proprietorship that: (A) is formed for the purpose of making a profit; (B) is independently owned and

operated; and (C) has fewer than 100 employees or less than \$1 million in annual gross receipts."

Texas Government Code Annonated, §2006.001(1) (Vernon 1998).

Virtually any small business whose underground storage tanks leak are potentially subject to cost

increases under the proposed rule. Such businesses could include heavy equipment owners or lessors, trucking companies, agricultural operations or other small businesses that own one or more petroleum storage tanks to service motorized equipment. Small fuel retailers, however, may be adversely affected as a group by the proposed rules. The commission does note that all compliance deadlines have passed for meeting release detection, spill and overfill, tank integrity assessment and cathodic protection standards. Therefore, all tanks operating today must meet all technical standards and be less likely to suffer a leak.

Of the twelve petroleum storage tank sites in the Regulatory Impact Analysis, the "worst case" PST site resulted in an estimated \$187,623 increase in the cost to assess, remediate, monitor and close the site under the proposed rule. (As mentioned earlier in this report, \$187,623 is based on the higher and more conservative \$151,200 estimated groundwater remediation cost than the \$107,297 remedial cost actually used in the case examples.) That is an increase over the actual cost of \$24,343 under existing program rules, which would bring the responsible party's total estimated cost under the proposed rules to \$211,966. For a small business with \$500,000 in annual sales, a \$187,623 estimated cost increase for one site would represent 38% of sales or \$37.52 for every \$100 in annual sales. For a business with \$1,000,000 in annual sales, a \$187,623 estimated cost increase for one site would represent 19% of sales or \$18.76 for every \$100 in annual sales. For a business with \$2,000,000 in annual sales, that \$187,623 cost increase for one site would represent 9% of sales or \$9.38 for every \$100 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$1,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$1,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$1,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$3,000,000 in annual sales. For a business with \$1,000,000 in annual sales. For a business with \$3,000,000 in annual sales.

high-volume business, so even "small" fuel retailers will typically post annual sales in excess of \$3 million. Under the proposed rules, large businesses are expected to incur the same cost increases on a per-site basis as small businesses. For corporations such as Texaco, with 1997 revenue of \$46 billion, the \$187,623 estimated cost increase for one site discussed earlier in this paragraph would represent less than 1% of sales or less than 1¢ for every \$100 in annual sales.

The proposed rule, however, affords cost savings to responsible parties who are small businesses and who are required to demonstrate financial assurance for post response action care. Under the proposed rule, small business responsible parties may seek to reduce the amount of financial assurance required if the post response action care period is greater than 10 years. Actual cost savings realized by small business responsible parties as a result of this provision will vary with the amount of financial assurance required. However, for estimating purposes only, by assuming post response action cost at \$30,000 per year (based on \$5,000 for lab analysis and \$25,000 for a consultant to collect samples), the cost to demonstrate for 10 years would be \$300,000, substantially less than \$900,000 for 30 years. Further assuming the responsible party uses a bank letter of credit to demonstrate financial assurance and the responsible party's annual cost for a bank letter of credit is 0.75%, demonstrating financial assurance for 10 years at \$300,000, would cost an estimated \$2,250 per year (\$300,000 x 0.75%). In this example, the 10-year demonstration cost represents a \$4,500 annual savings from the 30-year demonstration cost of \$6,750 per year (\$900,000 x 0.75%). If financial assurance is still required at the end of the first or second 10-year period, the small business responsible party may again seek to demonstrate financial assurance for the subsequent 10-year period.

Despite the economic impact of the proposed rule on small businesses, the proposed rule is necessary to protect human health and the environment. The proposed rule incorporates performance standards scientifically determined to protect human health and the environment. Changing the rule to reduce the impact on small businesses is not legal or feasible because any change in the standards could put the public health and environment at risk at sites remediated by small businesses. The proposed rule incorporates performance standards rather than design standards and small business can seek to reduce the amount of financial assurances in some instances. These two features of the rule are specifically aimed at reducing the economic impact of the proposed rule on small businesses.

TAKINGS IMPACT ASSESSMENT

The commission has prepared a Takings Impact Assessment for this rule pursuant to Texas

Government Code Annotated §2007.043. This is a summary of the Takings Impact Assessment. The

specific purpose of the proposed rule is to create one risk-based rule that will guide affected property

assessments, notifications, and response actions through the establishment of a consistent, reliable

program that encourages the cost-effective corrective action for affected properties while ensuring the

adequate protection of human health and the environment. The proposed rule will substantially

advance this specific purpose through the use of a tiered process for the establishment of health-based

protective concentration levels, by allowing the use of site-specific data, and by providing flexibility in

selection and design of response actions. Because a landowner always has the option not to consent to

institutional controls such as deed restrictions and because another person, not the TNRCC, chooses

the remedy, the proposed rule itself will not limit or restrict the real property rights associated with the

affected property. Further, the proposed rule does not burden private real property because it: (1) will set minimum requirements for remediation of affected property; (2) will cause no release of chemicals of concern onto the affected property; (3) will not prohibit the pursuit of adequate compensation by the affected property owners from the responsible parties; and (4) will not cause a diminution in property value. Finally, the proposed rule is promulgated to fulfill federal requirements, prevent or abate public nuisance, is necessary to prevent a grave and immediate threat to life or property resulting from hazardous substances, and the proposed rule is in response to the real and substantial threat to public health and safety resulting from hazardous substances. For these reasons, the proposed rule is exempt from the requirement for a Takings Impact Statement as required by statute; however, the commission has prepared a Takings Impact Assessment which may be examined in Figure 2 of the preamble to proposed 30 Texas Administrative Code Chapter 350.

COASTAL MANAGEMENT PROGRAM CONSISTENCY REVIEW

The commission has reviewed the proposed rulemaking and found that the rules are subject to the Coastal Management Program and must be consistent with all applicable goals and policies of the Coastal Management Program (CMP).

The commission has prepared a consistency determination for the proposed rules pursuant to 31 TAC §505.22 and has found that the proposed rules are consistent with the applicable CMP goals and policies. The following is a summary of that determination. The CMP goal applicable to the proposed rules is the goal to protect, preserve, restore, and enhance the diversity, quality, quantity, functions,

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and values of coastal natural resource areas. CMP policies applicable to the proposed rules include the administrative policies and the policies for specific activities related to construction and operation of solid waste treatment, storage, and disposal facilities. Promulgation and enforcement of these rules is consistent with the applicable CMP goals and policies because the proposed rules will establish clear, consistent standards to guide the assessment and cleanup of contaminated properties from site investigation through post-response action care. The rules will require persons conducting response actions to ensure that the concentrations of chemicals of concern are protective of human and ecological receptors. The new rules will result in an overall environmental benefit across the state, including in coastal areas, by implementing a comprehensive and consistent approach to corrective action that utilizes new and scientifically sound corrective action methods; thereby serving to protect, preserve, restore, and enhance the diversity, quality, quantity, functions, and values of the coastal natural resource areas. In addition, the proposed rules do not violate any applicable provisions of the

The commission invites public comment on the consistency of the proposed rules with the applicable goals and policies of the Coastal Management Program.

SUBMITTAL OF COMMENTS

CMP's stated goals and policies.

Written comments may be mailed to Bettie Bell, Texas Natural Resource Conservation Commission,
Office of Policy and Regulatory Development, MC 205, P.O. Box 13087, Austin, Texas 78711-3087
or faxed to (512) 239-4808, (512) 239-5687, or (512) 239-6385. Please reference Rules Tracking Log

Number 96106-350-WS. Comments must be received by 5:00 p.m., 30 days from the date of publication of this proposal in the *Texas Register*. For further information, please contact Chet Clarke, Greg Tipple, or Paul Lewis of the Remediation Division, (512) 239-0310; Scott Crouch, Voluntary Cleanup Program, (512) 239-2486; or Clark Talkington, Waste Policy and Regulations Division, (512) 239-6731. If you have specific questions on rule language regarding ecological risk assessments, please contact Larry Champagne, Remediation Division, (512) 239-0310.

The commission will hold two public hearings. A public hearing will be held on April 19, 1999, at 1:30 p.m., at the City of Houston Pollution Control Building Auditorium, 7411 Park Place Boulevard, Houston, Texas. A second public hearing on the proposal will be held on April 22, 1999, at 10:00 a.m. in Building E, Room 201S, of Texas Natural Resource Conservation Commission complex, located at 12100 North IH-35, Park 35 Technology Center, Austin. The hearings are structured for the receipt of oral or written comments by interested persons. Individuals may present oral statements when called upon or in the order of registration. Open discussion within the audience will not be allowed during the hearings; however, an agency staff member will be available to discuss the proposal 30 minutes prior to the hearings and answer questions before and after the hearings.

STATUTORY AUTHORITY

The amendments are proposed under the following statutory authority: Texas Water Code, §5.103 and §26.011, which provide the commission with authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state, Texas Water Code §5.103(c)

which states the commission must adopt rules when adopting, repealing, or amending any agency statement of general applicability that interprets or prescribes law or policy or describes the practice and procedure requirements of the agency, and Texas Solid Waste Disposal Act, Texas Health and Safety Code, §361.017, and §361.024, which provide the commission the authority to regulate industrial solid waste and municipal hazardous wastes and all other powers necessary or convenient to carry out its responsibilities. In addition, the amendments are proposed under Texas Water Code, §26.039, which states that activities which are inherently or potentially capable of causing or resulting in the spillage or accidental discharge of waste or other substances and which pose serious or significant threats of pollution are subject to reasonable rules establishing safety and preventive measures which the commission may adopt or issue; Texas Water Code, §26.121, which prohibits persons from discharging wastes into or adjacent to any water in the state unless authorized to do so and prohibits persons from committing any other act or engaging in any other activity which in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water in the state; Texas Water Code, §26.262, which states that it is the policy of this state to prevent the spill or discharge of hazardous substances into the waters in the state and to cause the removal of such spills and discharges without undue delay; and Texas Water Code, §26.264, which provides the commission with authority to issue rules necessary and convenient to carry out this policy. Authority to propose the amendments is also provided by Texas Water Code, §26.341, which states that it is the policy of this state to maintain and protect the quality of groundwater and surface water resources in the state from certain substances in underground and aboveground storage tanks that may pollute groundwater and surface water resources, and requires the use of all reasonable methods,

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including risk-based corrective action to implement this policy; Texas Water Code, §26.345, which

provides the commission with the authority to adopt rules necessary to carry out this policy; and Texas

Water Code, §26.401, which states that it is the policy of this state that discharges of pollutants,

disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner

that will maintain present uses and not impair potential uses of groundwater or pose a public health

hazard, and that the quality of groundwater be restored if feasible.

The amendments affect Water Code, Chapter 26, and Health and Safety Code Chapter 361.

SUBCHAPTER A: INDUSTRIAL SOLID WASTE AND MUNICIPAL HAZARDOUS WASTE MANAGEMENT IN GENERAL

§335.8

§335.8. Closure and Remediation

(a) Applicability. The regulations of this section, in addition to other applicable rules, permits or orders, establish the obligation for persons to perform closures or remediations for facilities or areas containing industrial solid waste or municipal hazardous waste. The person can fulfill this obligation by meeting the risk reduction standards of this section or the remedy standards of Chapter 350 of this title (relating to Texas Risk Reduction Program), depending on the time of initial notification to the executive director of intent to conduct closure or remediation, and will remain in effect for persons who notify the executive director before the effective date of Chapter 350 of this title of a closure or remediation in accordance with this section. Persons who notify of a closure or remediation in response to this section have up to five years from the effective date of Chapter 350 of this title within which to submit for executive director review and approval according to this section a final report which demonstrates attainment of risk reduction standards 1 or 2. In order to qualify for this grandfathering provision, persons who have submitted an initial notification to conduct a risk reduction standard 1 or 2 response action prior to the effective date of Chapter 350 of this title must resubmit such notification letter within one year of the effective date of the effective date of Chapter 350 of this title must resubmit

notification. The person who has submitted a work plan under risk reduction standard 3 that establishes response action objectives and cleanup criteria (e.g., a baseline risk assessment or a corrective measures study would be adequate but not an investigation work plan or an investigation report) to the executive director under this section prior to the effective date of Chapter 350 of this title may elect to either continue under these rules or to proceed under Chapter 350 of this title. Any person who qualifies for this grandfathering provision and elects to continue using the provisions of this section may not use any of the provisions of Chapter 350. If the executive director denies approval of the final report under this section for reasons of technical inadequacy, the executive director may require the person to comply with the requirements of Chapter 350 of this title. For closures and remediations initially reported to the executive director on or after the effective date of Chapter 350 of this title, the person shall use the procedures of Chapter 350. [The regulations in this section are effective on June 28, 1993. The regulations in this section apply to persons who undertake the closure of facilities used for the storage, processing or disposal of industrial solid waste or municipal hazardous waste. The regulations in this section also apply to persons who undertake the remediation of contaminated media resulting from unauthorized discharges from such facilities, either as part of closure or at any time before or after closure. The regulations in this section also apply to persons who undertake remediation of areas that are not otherwise designated as a facility but that contain unauthorized discharges of industrial solid waste or municipal hazardous waste. The regulations of this subsection, in addition to other applicable rules, permits or orders, establish the obligation for persons to perform closures or remediations for facilities or areas containing industrial solid and municipal hazardous waste and further specify the mechanism to evaluate such closures or

remediations. The obligation to perform remediations for unauthorized discharges of contaminants under the state superfund and spill response programs occurs through the application of the commission's rules and statutes pertaining to those programs; however, once such obligation has occurred the regulations in this section will be used to specify the mechanism to evaluate remediation of unauthorized discharges of contaminants subject to those programs.] The regulations in this section supplement but do not replace any requirements for closure or remediation specified in the regulations for the programs subject to these rules and shall continue to apply as specified in paragraphs (1) - (5)

- [(1) Persons shall complete notification and response actions for spills in accordance with the Texas Water Code, §26.039 and §26.261 and the administrative and procedural requirements of the commission to carry out the Texas Hazardous Substance Spill Prevention and Control Act. This section applies to spills when the response actions do not result in remediation within the timeframes specified by the commission's spill response program. In such circumstances the person shall submit a plan in accordance with subsection (b) of this section.]
- (1) [(2)] This section applies to remediations performed under the state superfund program in accordance with Subchapter K of this chapter (relating to Hazardous Substance Facilities Assessment and Remediation) with the exception that information, including a baseline risk assessment, shall be provided and potential remedies shall be evaluated in response to Subchapter K rather than the requirements of subsections (c) and (d) of this section and §335.553 (relating to Required Information)

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and §335.562 (relating to Remedy Evaluation Factors for Risk Reduction Standard Number 3). Also, under the state superfund program, persons shall determine media cleanup levels assuming future residential land use unless the person demonstrates to the satisfaction of the executive director using the provisions of §335.563(e) of this title (relating to Media Cleanup Requirements for Risk Reduction Standard Number 3) that an alternative land use is more appropriate.

- (2) [(3)] Any person who stores, processes, or disposes of industrial solid waste or municipal hazardous waste at a facility permitted under §335.2(a) of this title (relating to Permit required), shall, unless specifically modified by other order of the commission, close the facility in accordance with the closing provisions of the permit.
- (3) [(4)] Any person who stores, processes, or disposes of hazardous waste is also subject to the applicable provisions relating to closure and post-closure in Subchapters E and F of this chapter (relating to Interim Standards for Hazardous Waste Storage, Processing, or Disposal Facilities; and Permitting Standards for Owners and Operators of Hazardous Waste Storage, Processing, or Disposal Facilities, respectively).
- (4) [(5)] Persons who have received approval of closure or remediation plans by the executive director and have either completed or not completed the action prior to the effective date of this section may either maintain or complete the action, as applicable, according to the approved plan and are not subject to the requirements of this section unless a substantial change in circumstances

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develops at the facility or area which results in an unacceptable threat to human health or the environment as described in §350.35 of this title (relating to Substantial Change in Circumstances) [subsection (b)(5) of this section]. Plans or reports submitted but not approved prior to the effective date of this section will be reviewed according to the regulations in effect at the time of document submittal. If the executive director denies approval of the plan or report under those regulations for reasons of technical inadequacy, the person must then comply with the requirements of Chapter 350 of this title [this section] upon receipt of written notice from the executive director that the plan or report is not approved. Closure plans approved as part of an industrial solid or municipal hazardous waste permit which was issued prior to the effective date of this section but not implemented at the time of permit renewal are subject to review for compliance with Chapter 350 of this title [this section] as part of the permit renewal process. Persons may resubmit such plans or reports that they have revised voluntarily to conform with the requirements of Chapter 350 of this title [this section], unless such resubmittal would result in noncompliance with a previously approved or imposed schedule of compliance.

- (5) [(6)] The requirements of this section do not apply to substances discharged or spilled from storage tanks regulated by Chapter 334 of this title (relating to Underground and Aboveground Storage Tanks).
- (b) Closure and Remediation Obligations. Persons identified in subsection (a) of this section have the obligation to conduct the activities described in paragraphs (1) (4) of this subsection when

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performing a closure or remediation. Upon receipt of approval by the executive director of reports demonstrating compliance with all applicable requirements, the person has completed these obligations unless a substantial change in circumstances results in an unacceptable risk to human health or the environment as described in paragraph (5) of this subsection.

- (1) (No change.)
- (2) Perform closure or remediation activities at the facility or area of unauthorized discharge which meet one or more of the risk reduction standards specified in subparagraphs (A) (C) of this paragraph. Unless the requirement to close a waste management facility <u>component</u> is specified by other rule, permit or order, the person will determine the time for initiation of closure. The timely remediation of unauthorized discharges resulting from <u>continuing</u> operation of a waste management <u>facility component</u> [unit] does not compel the closure of the <u>component</u> [unit] unless closure is a necessary part of the remedy to achieve protection of human health and the environment.

- (3) (5) (No change.)
- (c) Notification and Initiation Requirements. <u>Persons who qualify according to</u> subsection (a) of this section for an extended period of time for submittal of a final report to be

reviewed according to this section must also respond, as appropriate, to the requirements of paragraphs

(1) - (5) of this subsection.

(1) A person who intends to <u>continue</u> [perform] any activity of closure or remediation

in accordance with subsection (b) of this section shall determine the risk reduction standard(s) to be

attained. If required by subsection (a) of this section to resubmit this notification, the [The] person

shall notify the executive director and the commission's office in the district where the facility or area

is located in writing of the following information within one year of the effective date of Chapter 350

of this title (relating to Texas Risk Reduction Program): [at least 10 days prior to conducting the

activity:]

(A) - (C) (No change.)

(2) (No change.)

(3) If the person intends to attain risk reduction standard number 3, [or determines that

standard numbers 1 or 2 has not been attained in a self-implemented action,] the person shall submit to

the executive director the information specified in §335.553(b) of this title (relating to Required

Information) for approval prior to beginning, or continuing, as applicable, the closure or remediation

activities.

(d) (No change.)

SUBCHAPTER K: Hazardous Substance Facilities Assessment and Remediation §§335.341, 335.342, 335.344, 335.348

STATUTORY AUTHORITY

The amendments are proposed under the following statutory authority: Texas Water Code, §5.103 and §26.011, which provide the commission with authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state, Texas Water Code §5.103(c) which states the commission must adopt rules when adopting, repealing, or amending any agency statement of general applicability that interprets or prescribes law or policy or describes the practice and procedure requirements of the agency, and Texas Solid Waste Disposal Act, Texas Health and Safety Code, §361.017, and §361.024, which provide the commission the authority to regulate industrial solid waste and municipal hazardous wastes and all other powers necessary or convenient to carry out its responsibilities. In addition, the amendments are proposed under Texas Water Code, §26.039, which states that activities which are inherently or potentially capable of causing or resulting in the spillage or accidental discharge of waste or other substances and which pose serious or significant threats of pollution are subject to reasonable rules establishing safety and preventive measures which the commission may adopt or issue; Texas Water Code, §26.121, which prohibits persons from discharging wastes into or adjacent to any water in the state unless authorized to do so and prohibits persons from committing any other act or engaging in any other activity which in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water in the state; Texas Water Code, §26.262, which states that it is the policy of this state

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to prevent the spill or discharge of hazardous substances into the waters in the state and to cause the

removal of such spills and discharges without undue delay; and Texas Water Code, §26.264, which

provides the commission with authority to issue rules necessary and convenient to carry out this policy.

Authority to propose the amendments is also provided by Texas Water Code, §26.341, which states

that it is the policy of this state to maintain and protect the quality of groundwater and surface water

resources in the state from certain substances in underground and aboveground storage tanks that may

pollute groundwater and surface water resources, and requires the use of all reasonable methods,

including risk-based corrective action to implement this policy; Texas Water Code, §26.345, which

provides the commission with the authority to adopt rules necessary to carry out this policy; and Texas

Water Code, §26.401, which states that it is the policy of this state that discharges of pollutants,

disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner

that will maintain present uses and not impair potential uses of groundwater or pose a public health

hazard, and that the quality of groundwater be restored if feasible.

The amendments affect Water Code, Chapter 26, and Health and Safety Code Chapter 361.

§335.341. Purpose and Scope

(a) (No change.)

- (b) This subsection describes the procedures for identifying, proposing, listing, and delisting facilities on the State Registry.
 - (1) (No change.)
- (2) If the potential endangerment cannot be fully resolved by the present owner or operator, then the executive director shall determine whether the potential endangerment can be resolved by voluntary cooperation of some or all of the potentially responsible parties (PRPs) identified in the Act, §361.271 or §361.275(g) pursuant to an agreed administrative order issued by the commission or a Voluntary Cleanup Agreement pursuant to Chapter 333 of this title (relating to Voluntary Cleanup Programs). If a facility can be cleaned up pursuant to an agreed administrative order or an executed Voluntary Cleanup Agreement, then it shall not be proposed for listing.
 - (3) (5) (No change.)
- (c) A preliminary site investigation, removal action, remedial investigation, and remedial action shall comply with all requirements found in Health and Safety Code, Chapter 361, Subchapter F (relating to Registry and Cleanup of Certain Hazardous Waste Facilities); the requirements of this subchapter; and the requirements of Chapter 350 of this title (relating to Texas Risk Reduction Program) for any release or threatened release of hazardous substances into the environment that may constitute an imminent and substantial endangerment to public health and safety or the environment.

Where there is a conflict between the requirements of Chapter 350 of this title and the requirements of Chapter 361, Subchapter F and this subchapter, the requirements of Chapter 361 and of this subchapter shall apply.

§335.342. Definitions.

Definitions set forth in the Act that are not specifically included in this section shall also apply. The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) - (16) (No change.)

(17) Remedial action (RA) - An action, including remedial design and post-closure care, consistent with a remedy taken instead of or in addition to a removal action in the event of a release or threatened release of hazardous substances into the environment to prevent or minimize the release of a hazardous substance so that the hazardous substance does not cause an imminent and substantial danger to present or future public health and safety or the environment. A remedial action is similar to a response action under the Texas Risk Reduction Program.

(18) - (19) (No change.)

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(20) Remedial investigation (RI) - An investigative study which may include removals, feasibility study, development of human health-based protective concentration levels [baseline risk assessment], ecological risk assessment, or similar study, designed to adequately determine the nature and extent of a release or threatened release of hazardous substances and, as appropriate, its impact on air, soils, groundwater, and surface water, both within and beyond the boundaries of the facility in accordance with the requirements of §335.348 of this title (relating to General Requirements for Remedial Investigations). The remedial investigation is similar to an affected property assessment report outlined in the requirements of the Texas Risk Reduction Program.

(21) - (25) (No change.)

§335.344. Delisting and Modifications.

(a) - (b) (No change.)

(c) In making a determination under subsection (a) of this section, the executive director will consider the following:

(1) - (3) (No change.)

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- (4) whether, because of the nature of any removals and the remedial action implemented at the facility, it is not yet feasible to make a determination that the remedial action has effectively remediated the release or threatened release of hazardous substances; [or]
- (5) whether the site has been accepted under the voluntary cleanup program as set out in Chapter 333 of this title (relating to Voluntary Cleanup Programs) ; or[.]
 - (6) whether the site has been deferred to a state or federal agency for further action.
- (d) With the exception of paragraphs (c)(5) and (c)(6) of this section, no requests for the delisting of a facility from the State Registry or requests to modify information about a facility eligible for listing on the Registry will be granted unless, at a minimum, the facility has been investigated under the terms of a remedial investigation approved by the executive director.

§335.348. General Requirements for Remedial Investigations.

- (a) (c) (No change.)
- (d) A remedial investigation may include the following, as appropriate to a particular facility, for the purpose of allowing the executive director to select an appropriate remedial action:

(1) - (7) (No change.)

- (8) <u>development of human health-based protective concentration levels.</u> [a baseline-risk assessment.]
- (e) Human health-based protective concentration levels shall be developed and [A baseline risk assessment will be conducted in accordance with the Environmental Protection Agency's Risk Assessment Guidance for Superfund Volume 1: Human Health Evaluation Manual or other equivalent EPA guidance document.] an ecological risk assessment shall [also] be completed before the executive director's selection of the proposed remedial action. The evaluation may not be required when the executive director determines that remediation standards are apparent and adequately protective of human health and the environment.
 - (f) (m) No change

SUBCHAPTER S: RISK REDUCTION STANDARDS

§335.551

The amendments are proposed under the following statutory authority: Texas Water Code, §5.103 and §26.011, which provide the commission with authority to adopt any rules necessary to carry out its powers, duties, and policies and to protect water quality in the state, Texas Water Code §5.103(c) which states the commission must adopt rules when adopting, repealing, or amending any agency statement of general applicability that interprets or prescribes law or policy or describes the practice and procedure requirements of the agency, and Texas Solid Waste Disposal Act, Texas Health and Safety Code, §361.017, and §361.024, which provide the commission the authority to regulate industrial solid waste and municipal hazardous wastes and all other powers necessary or convenient to carry out its responsibilities. In addition, the amendments are proposed under Texas Water Code, §26.039, which states that activities which are inherently or potentially capable of causing or resulting in the spillage or accidental discharge of waste or other substances and which pose serious or significant threats of pollution are subject to reasonable rules establishing safety and preventive measures which the commission may adopt or issue; Texas Water Code, §26.121, which prohibits persons from discharging wastes into or adjacent to any water in the state unless authorized to do so and prohibits persons from committing any other act or engaging in any other activity which in itself or in conjunction with any other discharge or activity causes, continues to cause, or will cause pollution of any of the water in the state; Texas Water Code, §26.262, which states that it is the policy of this state to prevent the spill or discharge of hazardous substances into the waters in the state and to cause the

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removal of such spills and discharges without undue delay; and Texas Water Code, §26.264, which

provides the commission with authority to issue rules necessary and convenient to carry out this policy.

Authority to propose the amendments is also provided by Texas Water Code, §26.341, which states

that it is the policy of this state to maintain and protect the quality of groundwater and surface water

resources in the state from certain substances in underground and aboveground storage tanks that may

pollute groundwater and surface water resources, and requires the use of all reasonable methods,

including risk-based corrective action to implement this policy; Texas Water Code, §26.345, which

provides the commission with the authority to adopt rules necessary to carry out this policy; and Texas

Water Code, §26.401, which states that it is the policy of this state that discharges of pollutants,

disposal of wastes, or other activities subject to regulation by state agencies be conducted in a manner

that will maintain present uses and not impair potential uses of groundwater or pose a public health

hazard, and that the quality of groundwater be restored if feasible.

The amendments affect Water Code, Chapter 26, and Health and Safety Code Chapter 361.

§335.551. Purpose, Scope and Applicability.

(a) - (b) (No change.)

(c) Applicability. The requirements of this subchapter apply to persons who undertake a

closure or remediation in accordance with §335.8 of this title (relating to Closure and Remediation)

during the period from June 28, 1993 until the effective date of the Texas Risk Reduction Program in Chapter 350 of this title (relating to Texas Risk Reduction Program), unless the person qualifies for an extended period of time as specified in §335.8(a) of this title (relating to Applicability) for submission of a final report to be reviewed according to this subchapter. If the executive director denies approval of the final report for reasons of technical inadequacy, the executive director may require the person to comply with the requirements of Chapter 350 of this title. For remediations initially reported to the executive director on or after the effective date of Chapter 350 of this title, the person shall use the procedures of Chapter 350 of this title in place of this subchapter.